

## CONVERTIBLE HAIR ROLLER

### Related Applications

This is the non-provisional filing of application Serial No. 60/499,605, filed on September 2, 2003 entitled "Convertible Hair Roller."

### Background of the Invention

This invention relates to a device for rolling hair.

For a long time, people have been trying to perfect the way hair is curled. Hair curlers are well known in the art. Such devices traditionally comprise a cylinder upon which hair is rolled or curled. Traditional hair rollers have hair wrapped around a cylinder. Unfortunately, after rotation the hair is typically wrapped on top of previously rolled hair, resulting in unsecured hair, undesired curl, and/or the need for an additional device to secure the remaining hair. Additionally, traditional hair rollers are bulky and take up a lot of storage space.

Generally many strands of hair are rolled about each cylindrically shaped hair roller in order to achieve a desired appearance when the rollers are removed. Heat is often added to the hair rollers in order to expedite the rolling process.

### Summary of the Invention

The invention provides a device used for curling hair. The device includes a flexible member having a first position and a second position. When the flexible member is urged from the first position, the flexible member curls upon itself into the second position. A porous material borders the flexible material. A plurality of hook-type fasteners attach to one side of the porous material. The porous material is between the flexible member and the hook-type fasteners.

The flexible member may be comprised of metal or plastic. The porous material may be comprised of cotton. The hook-type fasteners may be comprised of plastic. Additionally, the flexible member may contain a plurality of apertures.

The invention further provides a device for curling hair, wherein the hook-type fasteners are directly connected to the flexible member.

#### Brief Description of the Drawings

The invention is described in greater detail in the following description of examples, taken in conjunction with the drawing figures in which:

FIG. 1 is a cut-away view of one form of the device according to the invention;

FIG. 2 is a perspective view of one form of the flexible member in a first position according to the invention;

FIG. 3 is a perspective view of one form of the flexible member in a second position according to the invention;

FIG. 4 is a perspective view of one form of the device in its first position according to the invention;

FIG. 5 is a perspective view of one form of the device in its second position according to the invention; and

FIG. 6 is a perspective view of one form of the device according to the invention.

#### Description of Examples Embodying the Invention

For the purpose of promoting an understanding of the principles of the invention, references will be made to the embodiments illustrated in the drawings. It will come, and nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alternations and further modifications in the illustrated device, in such further

applications of the principles of the invention illustrated herein being contemplated as would normally occur to one skilled in the art to which the invention relates.

The invention encompasses a device used for rolling hair. One form of the device 10 for rolling hair, as shown in Figure 1, is comprised of at least one flexible member 12, a fibrous material 14 and hook type fasteners 16. The flexible member 12 is bordered by the fibrous material 14. The flexible member 12 has a first position and a second position. In the first position the flexible member 12 is straight and semi rigid. When the flexible member 12 is urged from its first position, the flexible member 12, curls upon itself into a second position.

The flexible member 12 dictates the overall position of the device 10. As shown in Fig. 2, when the flexible member 12 is in the first position, the device 10 is straight and flat. When the flexible member 12 is urged into the second position, the device 10 is curled upon itself, as shown in Fig. 3. The flexible member 12 is designed to curl underneath itself, as indicated by the arrow 21 in Fig. 3.

The flexible member 12 may be made of a malleable metal, plastic or any other material suitable to perform the function described herein. The flexible member 12 also acts as a conductor of heat when outside heat is added to the device 10. For example, outside heat may be added by means of a traditional hair blow dryer, or any other method sufficient to dry hair. The flexible member 12 may also be porous, aiding in heat transfer and moisture release.

A fibrous material 14 having a first side and a second side, borders the flexible member 12 on at least one side. The fibrous material 14 may be cloth, paper or other porous material having sufficient insulative properties to prevent the hair from burning when heat is applied to the device 10. A plurality of hook type fasteners 16 are attached to the fibrous material 14 on a side opposite of where the flexible member 12 is bordered by the fibrous

material 14. The hook-type fasteners 16 do not cover the entire side of the fibrous material 14. In an alternate embodiment, the hook-type fasteners 16 may cover the entire side of the fibrous material 14. The hook-type fasteners 16 are concentrated on the fibrous material 14, such that the hook-type fasteners 16 will grip hair 18 but will not entangle the hair 18. The hook-type fasteners 16 are preferably made of plastic.

As shown in Figure 4, hair 18, is placed upon, and engaged by, the hook-type fasteners when the flexible member 12 is in a first position. As shown in Figure 5, as the flexible member is urged from its first position, the flexible member begins curling upon itself while the hook type fasteners 16 engage the hair 18, until such point that the flexible member 12 is in its second position.

The device 10 may have a variety of widths and lengths such that the width does not exceed the length. Multiple devices 10 may be combined together to accommodate varying lengths and thickness of hair 18.

In an alternate embodiment of the device 10, as shown in Fig. 6, the hook-type fasteners 16 are directly connected to the flexible member 12. The hook-type fasteners 16 may be sewn to the flexible member 12 with thread. The hook-type fasteners 16 may also be secured to the flexible member 12 by means of glue, heat seal, or other method suitable for securing the hook-type fasteners 16 to the flexible member 12. It is believed this method is preferred.

Various features of the invention have been particularly shown and described in connection with the illustrated embodiments of the invention. However, it must be understood that these particular products and their method of manufacture, do not limit but merely illustrate and the invention to be given its fullest interpretation within the terms of the appended claims.